Claims

What is claimed is:

1. A mounting pin for securing a sieve element to a support frame comprising:

a cylindrical body having a bore formed entirely therethrough, the body having a mushroom shaped head with a frustoconical upper surface extending from an upper edge thereof, the bore formed through the body having an outlet at a lower end thereof that is constructed and arranged such that the upper edge of a supporting rib may be accessed therethrough for the purpose of securing the mounting pin on the rib, the mounting pin being secured to the upper edge of the rib by forming a weld between the lower end of the body and the supporting rib through the outlet of the bore.

2. The mounting pin for securing a sieve element to a support frame of claim 1 wherein the diameter of the body of the mounting pin is wider than the width of the rib on which it is mounted.

3. A sifting machine comprising:

a subframe;

a support frame that rests on, and is secured to, the subframe, the support frame comprising a plurality of elongate thin ribs having upper edges arranged in a substantially coplanar relationship;

each of the ribs being further provided with a plurality of mounting pins, each mounting pin comprising a cylindrical body having a bore formed entirely therethrough, the body having a mushroom shaped head with a

frustoconical upper surface extending from an upper edge thereof, the bore formed through the body having an outlet at a lower end thereof that is constructed and arranged such that the upper edge of a supporting rib may be accessed therethrough for the purpose of securing the mounting pin on the rib, the mounting pin being secured to the upper edge of the rib by forming a weld between the lower end of the body and the supporting rib through the outlet of the bore; and

an array of sieve elements arranged in abutting juxtaposition and secured to the support frame by the mounting pins, the head of each mounting pin engaging a pair of adjacent recesses, each recess being formed in the respective edges of abutting sieve elements and wherein the pair of adjacent recesses work together to form a receptacle complementary to the shape of the head of the mounting pin.

4. A sieve element for sifting particulate materials having a plurality of lateral edges comprising a bead formed along the lateral edges of the sieve element such that when the sieve element is placed in abutting juxtaposition with one or more additional sieve elements, the beads on the abutting edges of the respective sieve elements will contact one another to form a seal therebetween to prevent the flow of particulate materials therebetween.

5. A sieve element for sifting particulate materials comprising:

a panel having a plurality of lateral edges defining a sifting surface of the panel;

a plurality of sieve openings of predetermined size formed through the sifting surface of the panel; and,

a plurality of receptacles formed in the lateral edges of the panel, the receptacles being constructed and arranged to receive therein a mechanism for securing the sieve element to a support frame of a sifting machine, the receptacles being further constructed and arranged such that an area of the sifting surface corresponding to the location of a respective receptacle has a diameter that is less that twice the diameter of the receptacle itself.